

Human Capital Organization of Hospital Management

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Abstract: Health is a vital asset in human life. Once your health is damaged, the importance of assets such as money, house, and car lose significance in your eyes. With people working harder than ever and the improvements in technology that make life easier, people are becoming less active and do not look after their health. It is human nature that we understand the value of things only when we lose them. Hospitals are very important institutions in a country and it is a testament to the development. With rapid changes in technology, modern and with well-equipped hospitals are available, it is necessary to have qualified staff/doctors working at the hospitals. As well as medical doctors other health personnel such as nurses, anaesthetists and radiologists must be organized in order to manage the hospital both economically and sociologically. The administration of a hospital should be led like a conductor who manages all members of an orchestra where the instruments should be harmonized. Therefore, the organization of hospitals should be based upon a planned future. Firat University Hospital in Turkey is a large regional hospital that was established in 1983. This hospital has about 1000 beds. The lack of organization and management had serious financial consequences and the hospital became bankrupt. The majority of patients chose to go to private hospitals where they thought they received better service. In 2008, the whole management was replaced and organizational and human capital matters were improved. In this article, the changes in organizational and development manners are discussed. The difference between old and new rules and regulations are compared. Finally, the benefits of the performance systems that have been applied to Firat University Hospital will be explained and some recommendations will be submitted.

Keywords: human capital, performance systems, hospital management, organizational management

1. Introduction

Human capital is defined as the collective knowledge, skills and abilities of people within the organization that are acquired on the job, through training, and/or experience. Human capital is focused on the synchronization of these assets to meet the patients' satisfaction in a hospital (The Voice, 2010).

Strategic management in general and human resource strategic management, in particular, are aware of the necessity to know how they can configure human resource management systems and practices, with the aim of developing a competitive advantage for the hospital (Pablos & Lytras, 2008).

Most intellectual capital assessment tools are based on a top-down approach, which does not explore the particular business process and the specific knowledge needs deeply. They measure the intellectual capital of an organization as the return on tangible assets covering human capital such as staff skills, innovativeness and work experience (Chan & Lee, 2010).

Hospital management should use new technology and invest in new hospital automation systems. If new automation systems are adopted by healthcare professionals, the achievable gains of the systems can be attained (Esmaeilzadeh, Sambasivan & Kumar, 2010).

The main activity related to knowledge management is having the power of initiative, which leads us to infer that employees increasingly award greater value to the extent of the scope of initiative they are allowed and this leads to more active participation in an organization (Ferreira et al., 2010).

Knowledge sharing practices can be evaluated using some processes such as communication channels, sharing social tools-meetings, knowledge artefacts, training and apprenticeship, and communities of practices. Face-to-face communication, writing communication or mediated communication technologies are the communication channels between the staff and patients in a hospital. Educational materials, manuals and procedures, and patients' medical records are the phenomena of the knowledge artefacts. The training and apprenticeship of staff can be done by organizations (Alajmi et al., 2008).

There have been a lot of changes in health issues in the last decades in Turkey. The social health equilibrium has been provided by the Ministry of Health. The laws and regulations related to health issues have been changed and private health institutions have become available for any type of

patient. This has resulted in competition between the governmental and private health institutions in terms of providing better service.

In August 2008 the financial situation at the Firat University Hospital was very poor. The hospital was very late paying invoices, sometimes a year behind. The doctors and other health personals were not receiving their monthly additional payments in time, which yields to unsatisfied jobs and unfilled positions. Therefore, the patients could not be treated well since there are personal issues at the hospital.

This study will explain how Firat University Hospital has been rescued from its financial problems. First we will discuss the desired knowledge management in the hospitals, educational and research hospitals in Turkey, and the importance of management. In section 5, the former situation at Firat University Hospital will be evaluated. Then the incentive scheme used in the hospital is discussed. Finally, the changes made to the hospital' management and human capital will be compared before and after 2008 with providing some recommendations.

2. Knowledge Management in hospitals

Healthcare is a complex system consist of multiple subsystems where each of which operates independently and creates harmony throughout the entire organization. These subsystems have interactions with others through interfaces. The more robust, efficient the interface, the better management reflects itself. A systems approach can be used for deliver the healthcare (Dotan, 2003). This technique integrates human resource solutions with organizational needs and priorities. This enables us to realize the full picture (Dotan, 2003). In this type of approach an event in one part of the system affects all other parts as well.

Better knowledge management yields to quality of service. The quality of service at hospitals is to develop, implement, maintain, and continually improve the healthcare quality management system. Specifically, a well-managed knowledge in hospitals can have the following advantages:

- Lowering cost by limiting erroneous in the hospital
- Increasing performance since every subsystems have interactions with others.
- Enhance patient safety and satisfaction

3. Educational and research hospitals of universities in Turkey

There are in total of 1191 hospitals in Turkey. 836 hospitals belong to the Ministry of Health, while 355 hospitals are governed by the private sectors (Tedavibilgisi.com, 2011). About 60 hospitals managed by the universities are used for educational and research purposes. In fact, 66 hospitals that regulated by the Ministry of Health are called educational and research hospitals. If we add university hospitals to this number there are total of 126 educational and research hospitals where people can use health services and where medical students can be educated.

Educational and research hospitals have two goals. One of them is to educate medical doctors and the second goal is to treat the patients. Since the education level and availability of equipment is high in this type of hospitals, most major illnesses are treated there.

University hospitals are governed by university administrations using revolving funds facilities. A performance system has been applied at the hospitals. In detail, the income of a physician is directly proportional to teaching load, number of patient visits, performing check-ups and surgeries.

4. The importance of hospital management and appointing the Chief Executive Head Doctor

In hospital management a Chief Executive Head Doctor is very important because all administrative duties are done by him or her. The Financial Manager of Revolving Funds of the university is also very important because all financial administrations are controlled by this person. In particular, these two administrators should work as a team and should know the regulations well regarding hospital management and human capital. The rector of the university appoints the hospital officials. Because of the university rector elections, these hospital official selections can be subjective. Therefore, the rector can appoint someone who is not capable of performing administrative duties that the job requires.

According to Bashaar (2010), top management members of the hospitals must be able to plan, organize, control and lead the wards and departments with a focus on understanding and influencing the environment, setting the strategy and gaining commitment, planning, implementing and monitoring strategies and evaluating and improving performance. The top management must therefore have high capabilities with regard to human relations, strategic planning, team building, leadership, and negotiation and performance management (Bashaar, 2010).

Overall, before 2008, at Firat University Hospital there were administrative weaknesses in the manner of hospital management and organizational problems of human capital. This resulted in the hospital becoming bankrupt. In the next section, we will discuss the problems encountered at Firat University Hospital prior to August 2008.

5. The problems encountered before August 2008 at Firat University Hospital

After changing the hospital administration such as the Chief Executive Head Doctor and the Financial Manager of the Revolving Funds of the hospital after August 2008, the former organizations were examined by the new appointed administrators. A SWOT (Strength, Weakness, Opportunity and Threat) analysis was applied for the people who have direct relations with the hospital using methods such as conducting a survey with the doctors, other health personals, patients and companies that supplied medical instruments and medication to the hospitals. On the other hand, interviews were conducted with other people who had a direct or indirect relationship with the hospital. According to the findings from the above mentioned methods the following problems were discovered.

5.1 Lack of organizational administrating and confusing regulations

Because of confusing regulations about the hospital management, the responsible administrators such as the Dean of the Medical College, the Chief Executive Head Doctor of the hospital or the Financial Manager of Revolving Funds of the university, could not build coherent system to manage the hospital well before August 2008. There were some laws and regulations in the articles that contradicted each other. Some regulations were not written clearly, therefore they were implemented differently. Sometimes the different departments of Supreme Court could come to different decisions for the same issues. In this case, the administrators applied different rules to manage the hospitals. These chaotic environments annoyed all personnel. The university hospitals are institutions governed by the university administrators, namely these institutions are governed to the state. Personnel at the hospital such as doctors whose fields are in basic sciences, or administration staff working as secretaries and employees like nurses, technicians etc., have had a fixed monthly salary and are paid a fixed monthly contribution money. Therefore, improving health services was not important for some medical doctors and other employees who were working in health departments. These people could get their monthly money (salary and additional payments) continuously, although the income of the hospital was not enough to cover all the expenses. The university hospitals were not managed like private hospitals. This situation resulted in bankrupting the hospital budget.

There were temporary employees at the hospital, too. At that time, except for doctors, health personnel and administrators, about extra 800 people worked at the hospital temporarily. The monthly salaries of these people were very low (lower than US \$400). This group did not perform well and the patients and their relatives were not satisfied about the services provided by these people (Varol, 2009a). Therefore, a lot of patients preferred to be treated by private hospitals. In these cases, patients did not need to pay extra fees to the private hospitals, because the government covered all expenses by the terms of the Social Health Insurance program in Turkey.

5.2 Overload stocks of the hospital

The second main problem was the stocks of the hospitals. Formerly, the hospital management bought a lot of instruments, medical devices etc., without making supply and demand analysis before they ordered the goods. Since there is a constant change in the technology, the old accessories could not be used with new devices. Therefore, although there was a lot of stock, it could not be converted into capital. Because of the regulations it was not possible to sell the devices and materials to the market. So these accessories and tools were thrown away without using most of them at least once. The main problem was not using stock management software.

5.3 Late payment to the companies

Because of a lack of capital in the budget, the companies that supplied medical tools and instruments to the hospital could not receive their payments on time. Sometimes they had to wait more than a year. In fact, the companies either didn't want to sell any more devices to the hospital or they sold them very expensively. Therefore, the hospital had to buy instruments, tools and devices at very high prices compared with the free market.

According to law 4734, trading should be done following certain rules. The rules are very restrictive and because of a lot of formalities the hospital could not buy the devices and instruments easily. If a company loses a tender it complains to the others. Because of these complaints the hospital could not buy devices on time. Therefore, some services might have been postponed. In the health sector postponing health services cannot be accepted because sometimes the patients need immediate treatment.

5.4 The false behaviour of some doctors and health personnel

Some doctors never visited the polyclinics to treat the patients. Instead, they were checking the patients in their office where the patients had to pay extra money for it. This extra money was deposited directly into the revolving funds. Later, the doctor was receiving a determined percentage of this money. On the other hand, the patients were examined by the research assistants in the polyclinics.

Some health personnel such as nurses, technicians for anaesthesia, and radiologists were not polite to the patients since these people never received customer service training. As a result, the majority of the patients went to the private hospitals where they were treated well by the doctors and health personnel.

6. Reorganizing the university hospital management

It was urgently necessary to reorganize the university hospitals in order to rescue them from their poor financial condition and services. Therefore, new plans were created. In fact, there was enough human capital at the university hospitals. The problem lay with the lack of creating a new platform between knowledge and human capital. The former management problems of Firat University Hospital were fixed using SWOT analysis. Some problems occurred because of the formerly effective laws and regulations. Establishing new laws and regulations was very difficult, because this power is wielded by the Higher Education Council of Turkey, Ministry of Finance and by the Turkish Assembly.

Most of the other universities had the same problems. Most of them had financial difficulties. Therefore it was necessary to establish new associations and organizations against the above problems (Varol, 2008, 2009a, 2009b, 2010) and conduct the following techniques to improve the quality of the hospital.

6.1 Incentive scheme at Firat University Hospital

For improving the quality of care in hospitals, since an existing incentive schema applied to another institution may not cover the hospital's needs, a special incentive schema needs to be created for each institution. So, an investigation about current situation is very important at this stage.

For Firat University hospital we have created the incentive scheme based on Mahon Temple's study about characteristic and requirement of knowledge workers in four different stages. This study sets up the incentive scheme corresponding to knowledge workers of different stages, which can promote knowledge transfer and sharing in core business process (Zhang et al., 2008).

Knowledge sharing is the main point of the knowledge management. In a hospital sharing the knowledge is not enough to organize the whole system well. Therefore, incentive schemes details given in Table 1 was considered for the improving the management. First of all, the characteristics and requirements for improving and developing of the personal behaviour were investigated. In the transition period, the problems of the personal were exposed using a suitable orientation. In the development period the changes of the personal behaviour observed, and then, in realization period the balance between incentive schema and reward earning were evaluated.

Table 1: Incentive schemes for knowledge workers in different stages (Zhang, 2008)

Staff	Transition period	Development period	Realization period	Stable period
Characteristic	Seek a suitable orientation for one's development in the future	Seek to reach the state of self-equilibrium	Reach the balance between incentive and rewards	Personal growth conforms with need of incentive and rewards
Requirement	Have constant pursuit for growth of knowledge, individual and undertaking	Work independently, can finish distributed task	Business success	Wealth: get rewards matching with one's contribution
Incentive scheme	Provide training chances Provide career advisory	Provide a loose, independent work environment Promotion	Knowledge signing Knowledge patent Intensive pay	Incentive pay Incentive property rights Social Security

Findings are gathered using surveys that are applied to the patients. Face-to-face conversations with personal were another method to measure the development of the health personals. Rewards and promotion were the last stage of the incentive scheme. To determine the success of the personals, professional exams were applied. Successful people promoted in their departments.

6.2 In training service, creating new rules and organization schema

All employees, especially people who work temporarily at the hospital, have been educated by expert consultants. The importance and benefits of a quality service in a hospital was explained to all employees. After training the staff in the hospital, the satisfaction of the patients was investigated. The behaviour of the temporary employees was followed strictly by their superiors. If they did not obey the rules determined by the hospital administration, they were punished by salary cutting or not renewing their contracts for the next term.

All duties at the hospital have been newly determined. Each person knows and understands his/her responsibility and which kind of duties he/she should perform. Each month the improved people have been rewarded. For example, the best administrator of the months or the nurse providing the best care of the month have been selected and awarded with additional payments, etc.

A new organizing schema was created. All duties have been distributed and team work has been encouraged. Each month a report has been prepared and service improvements have been followed by experts. Sometimes SWOT analysis has been performed to fix the problems.

6.3 Improvements of the IT systems of hospital

New automated software was bought that is integrated with the tools used for examining patients. The Hospital Management Information System (HMIS) improved patient care, patient safety, and efficiency and reduced costs. This system provides easy access to critical information, enabling management to make better decisions on time. The entrance of the employees can be followed by HMIS using biometric instruments that control the fingerprint, finger vein, etc. All images of the patients are stored on a picture archiving and communication system (PACS) on the HMIS. Vacations and employees' absences can be tracked by the automated system. Stock control is managed by HMIS and therefore it is not necessary to buy more instruments, medical devices and medication, etc.

6.4 Financial support of the Ministry of Finance

Almost all university hospitals were suffering from poor financial situations, especially before 2011. From the end of 2010 and during the first half of 2011, the Ministry of Finance has supported university hospitals. Some university hospitals received a very large amount of money, for example Hacettepe University Hospital received about 144 million Turkish Lira while Firat University Hospital was supported by 13 million Turkish Lira. This support was very important to pay off the hospital's debts to the medical companies.

6.5 Association of University Hospital Confederation

An important association called the University Hospital Confederation (UHB) was established in 2009. The aim of this association is:

- To find out the problems of the university hospital,
- To evaluate and analysis the problems,
- To find solutions and submit recommendations,
- To share knowledge,
- To take initiative for innovation,
- To gather power with increasing to number of the members,
- To act together,
- To manage human capital, etc.

Although this association was established in 2009, it has already held its ninth meeting and it helped to prepare a new draft law called 'The Public Hospital Confederation'. The number of people in this association has increased very rapidly. To be a member of this association you have to be a faculty member of a university with at least an academic title of assistant professor or over. This association has political power and solved some of the regulation problems regarding the distribution of additional payments to the employees at the university hospitals.

6.6 Additional salary based on performance system

The Higher Education Council of Turkey (YOK) published a new regulation on the *Official Newspaper* with the number 27850 on 18 February 2011. It is called 'The regulation regarding to the method and fundamentals of the distributions of the additional payment that will be done on the income of the revolving funds at higher education institutions'. This regulation changed many things. The most important point of the regulation is the performance system that is used for the distribution of additional payments. Because of these new changes some doctors have received fewer additional payments while some have got more. Thanks to new regulations doctors who have examined more patients started to earn more additional payments. However, the doctors whose fields belong to the basic medical sciences have lost a lot of additional payments because they cannot examine patients.

6.7 Using incentive scheme for providing personal behaviour improvement

Table 2 shows promoted or rewarded people at Firat University Hospital after applying the rules of the incentive schema in Table 1. Except temporary staff, full time staff, physicians, and academicians were promoted or rewarded. As it is reflected, the most promoted or rewarded people are belonging to Research Assistant position, since they target to get promoted to a tenure-rank position. These changes are the results in applying incentive schema, new regulations, in service training, and a good/serious management of the administrators.

Table 2: Promoted or rewarded personal of the Hospital during Nov. 2008 and May 2011

Position or Title of the Personals	Number	Promoted or Rewarded	%
Prof. Dr.	45	27	60
Assoc. Prof. Dr.	56	30	53
Assist. Prof. Dr.	30	14	47
Research Assistant	289	240	83
Biologist	8	1	13
Nurses	291	150	51
Office Staff	64	5	8
Technologist	63	20	32
Technician	15	5	33
Laboratory Assistant	3	2	67
Temp. Staff	800	0	0

7. Conclusions

Hospitals perform better and earn money if they are directed by expert administrators who can manage and guide human capital and knowledge management together. Working as a team, being polite and responsible also increased the customer satisfaction as well.

For this system, it is necessary to have an up-to-date and effective Hospital Management Information System (HMIS) to control everything from the budget to the amount of stock, from following the absence of the employees to measuring and registering the performance of the doctors, health personnel and other staff.

Although the performance systems have distressed a lot of employees whose additional payments have been decreased, this system needs to be continued. Also, there are still some contradictions in the regulation. They should be improved using analysis such as SWOT.

Thanks to the Ministry of Finance a large number of university hospitals in Turkey could be rescued from their poor financial situations, but if the hospitals are not managed strictly, their financial health can decrease in time. Therefore, the administrators of the hospitals needs to be checked by the Ministry of Finance frequently.

It is obligatory to use the rules of incentive schema seriously to reach the maximum efficiency at a hospital. As shown from Table 2, after applying the incentive schema at the University Hospital, the satisfying of the petitions have increased. This results in increasing numbers of patients because they started to prefer University Hospitals for their health care.

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